

What Is Claimed Is:

1. A reinforcing fiber having an applied chemical treatment, wherein said applied chemical treatment is applied as an aqueous treatment comprising an emulsified epoxy resin, a polyurethane dispersion, at least one curing agent, a thickener, water, and a filler.

5 2. The product of claim 1 wherein said applied chemical treatment is dried.

3. The product of claim 1 wherein said thickener comprises a water soluble polymer.

10 4. The product of claim 1 wherein said thickener comprises an acrylamide polymer.

5. The product of claim 1 wherein said thickener comprises Drewfloc 270.

6. The product of claim 1 wherein said emulsified epoxy resin comprises Epirez 3456.

15 7. The product of claim 1 wherein said polyurethane dispersion comprises Witcobond W290H dispersed in water.

8. The product of claim 1 wherein the applied chemical treatment comprises a mixed aromatic amine curing agent and a cyanoguanidine curing agent.

20 9. The product of claim 8 wherein said mixed aromatic amine curing agent comprises Epicure 3253 and said cyanoguanidine curing agent comprises Amicure CG 1400.

Sub A1
cont'd

10. The product of claim 1 wherein said filler is selected from the group consisting of a calcium carbonate filler, a silicon dioxide filler, and an aluminum trihydrate filler.

11. The product of claim 2 wherein the reinforcing fiber forms a strand having said applied chemical treatment.

12. A reinforcing fiber mat comprising a plurality of said reinforcing fibers of claim 11.

13. A composite comprising a polymer matrix and said reinforcing fiber mat of claim 12.

14. The product of claim 1 wherein said filler comprises a calcium carbonate filler.

15. The product of claim 14 wherein said calcium carbonate filler comprises Georgia Marble Calwhite II.

16. The product of claim 1 wherein said filler comprises between approximately 10 and 40% by weight of said applied chemical treatment.

17. The product of claim 1 wherein said filler comprises between approximately 15 and 25% by weight of said applied chemical treatment.

18. A method for reducing surface fiber prominence in a reinforced composite part made from an epoxy urethane string binder, the method comprising the step of introducing a filler in a first amount to an aqueous chemical treatment bath, wherein said aqueous chemical treatment bath is used to apply a chemical treatment to a fibrous substrate that forms the epoxy urethane string binder.

Sub A
confid

19. The method of claim 18, wherein said first amount of said filler is between approximately 10 and 40 percent of the weight of said chemical treatment bath.

20. The method of claim 18, wherein said first amount of said filler is between approximately 15 and 25 percent of the weight of said chemical treatment bath.

21. The method of claim 18, wherein said filler is a calcium carbonate filler.

09943607.083001
"FOOEB0" 209E4660